



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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**JAN 27 2012**

Ref: 8EPR-N

Mr. Harry Barber, Manager  
Kanab Field Office  
Bureau of Land Management  
318 North 100 East  
Kanab, Utah 84147

Re: Alton Coal Tract Lease by Application Draft  
Environmental Impact Statement  
CEQ#20110371

Dear Mr. Barber:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (EIS) prepared by the Bureau of Land Management (BLM) for the Alton Coal Tract Lease by Application. Our comments are provided for your consideration pursuant to our responsibilities and authority under Section 102(2)(C) of the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(C), and Section 309 of the Clean Air Act (CAA), 42 U.S.C. Section 7609.

The EPA provided scoping comments to the BLM on March 9, 2007, which addressed a range of concerns including air quality, water quality, wetland protection, and impacts to communities. We also participated in discussions regarding the air quality modeling protocol and technical support document during the Draft EIS development. As a result of this collaboration, the BLM developed modeling protocols which produced defensible modeling results for assessing compliance with several national ambient air quality standards and increased confidence for the Federal and State stakeholders involved. While we did not reach agreement on all issues, we do thank the BLM for involving us in the development of this Draft EIS.

The Draft EIS analyzes the potential impacts of leasing and mining coal reserves in the Alton Coal tract. This tract encompasses 3,576 acres of land 0.10 miles south of the town of Alton in southwestern Utah. Coal is anticipated to be extracted at a rate of approximately 2 million tons per year for 21 to 25 years using primarily surface mining techniques. Coal will be trucked a distance of 110 miles to a rail loadout location near Cedar City, Utah. The Draft EIS analyzes three alternatives. Under Alternative A, the no action alternative, BLM would not offer the tract for lease. However, mining would occur at the Coal Hollow Mine, a 653-acre private lease adjacent to the proposed tract. Alternative B is the proposed action including the entire tract of 3,576 acres. Alternative C includes reduced tract acreage and seasonal restrictions to reduce resource conflicts. The Draft EIS presents a range of impacts for each action alternative depending on whether surface mining techniques are used to a depth of 200 feet or 300 feet of overburden. The Draft EIS does not identify a preferred alternative.

## **Bifurcated Review Process**

The EPA and the BLM have met several times in recent weeks to discuss the EPA's major concerns with the Draft EIS, including predicted exceedances of National Ambient Air Quality Standards (NAAQS) from both of the Action Alternatives, a lack of information necessary to determine compliance with two recently implemented NAAQS and the predicted impacts to wetlands under Alternative B. Our discussions with the BLM have emphasized the need to implement mitigation to address air quality impacts and identify opportunities for avoidance, minimization and mitigation of wetlands impacts. The BLM has committed to prepare a supplement to the Draft EIS that will address these concerns. We understand the BLM will notify the public of this commitment and the future availability of the supplemental information for public review and comment. Therefore, in this letter the EPA is providing our comments on the Draft EIS except for those related to air quality and wetlands. We will reserve our comments on the air quality and wetlands impacts and analysis until the EPA has had an opportunity to review the supplemental information during the public comment period. The EPA will provide a rating of the overall Draft EIS, as supplemented, at that time. The EPA refers to this process as a "bifurcated review process." The EPA believes that bifurcation provides an effective means of ensuring adequate analysis and full public disclosure of potential impacts, as well as opportunity for improved environmental outcomes. The EPA appreciates the BLM's willingness to provide additional air quality and wetland information that we believe is critical to understanding the impacts of leasing the Alton Coal tract. We are committed to assisting the BLM with this effort.

## **EPA's Comments and Recommendations**

The EPA's review of the Draft EIS identified air quality and protection of wetlands as significant issues for the proposed coal leasing. As stated above, we are deferring comments on these issues. In this letter, we identify the EPA's remaining concerns and suggestions regarding environmental justice, water quality, greenhouse gas emissions and climate change, sage grouse, and night sky impacts.

### **A. Impacts to Potential Environmental Justice Communities**

#### ***1. Identification of Potential Environmental Justice Communities***

Because the Draft EIS considers social and economic resources at the county level rather than at a more appropriate, smaller geographic level, the Draft EIS dilutes the percentages of minority and below poverty residents, thereby failing to identify possible environmental justice (EJ) communities. For example, localized impacts to Alton are likely to be much greater than to Kane County as a whole, yet Kane County is defined as the affected area. As shown by census data presented below, the demographics of Kane County likely do not reflect the demographics of Alton itself. Similarly, the use of Iron and Garfield Counties as affected areas fails to identify possible EJ communities, due to the localized impacts along the coal haul route. Ideally, the analysis would use the census block group when analyzing impacts to individuals and communities.

Additionally, the Draft EIS utilizes a threshold of 1.5 times the percentage of the State of Utah for determining potential EJ communities. This threshold may fail to identify an EJ community in the situation where the minority or low income population percentage of the affected area is meaningfully greater (but less than 1.5 times greater) than the corresponding population percentage in the state. The EPA recommends comparing block group percentages for below poverty and minority populations with



the state average. If a block group percentage is greater than the state average, we recommend further analysis regarding the potential for disproportionate adverse impacts.

The EPA recommends that census block group or, at a minimum, census tract data, be used to identify potential environmental justice considerations for the community of Alton as well as communities along the identified transportation routes (e.g., Hatch, Panguitch, and Cedar City), and that this information be considered in the development of affected environment and mitigation sections of the EIS. Specifically, we recommend using 2005-2009 American Community Survey data, which was published by the U.S. Census Bureau in early 2011, on populations along I-89, SR 14, SR 20, I-15, and SR 56.

The EPA examined readily available Census 2000 data to confirm our recommendation that there are communities in the affected area (near the mine or along the proposed coal haul route) that, when considered at the block group or census tract level, warrant further consideration as potential EJ communities. Our examination found several areas with below poverty percentages greater than the Census 2000 data of 8.8% below poverty for the State of Utah. For example:

- a. Census tract 1301 (which includes Alton) had a below poverty percentage of 12.4%, which is substantially greater than the state average for Census 2000. According to 2005-2009 American Community Survey data for Census Tract 1301, there have been increases in median household income, yet over 40% of the households earn less than \$30,000 a year and rent has increased more than 50% since 2000.
- b. Block group 3002 (which is along I-89, in the town of Panguitch) was greater than 17% below poverty.
- c. Block group 1002 (which includes the town of Paragonah) was greater than 15% below poverty.
- d. Block group 1001 (which includes the town of Parowan) was greater than 10% below poverty.
- e. Block group 5002 (which is along I-15 in Iron County, south of Summit) was greater than 20% below poverty.
- f. Block group 5003 (in the Cedar City area) was greater than 30% below poverty.
- g. Block group 7002 (also in the Cedar City area) was greater than 70% below poverty.
- h. Block group 3002 (near Iron Springs) was greater than 32% below poverty and 23% minority population.

## *2. Assessment of Potential Impacts to Environmental Justice Communities*

Because the above-referenced information suggests that there may be additional potential EJ communities impacted by the proposed coal mining operations, the EPA recommends that the associated impacts discussion in the EIS be expanded. We recommend a more detailed assessment of environmental justice and other socioeconomic concerns be performed for communities near the mine and along the coal haul route that have below poverty or minority populations greater than the state average. Such impacts may include housing, recreation, tourism, transportation, and services as well as environmental impacts including air quality and noise. The BLM Vernal Field Office is preparing an EJ analysis for inclusion in their final EIS for the Gasco project which you may want to refer to as an example of a more detailed EJ assessment. The EPA is particularly concerned that impacts may be disproportionate in the town of Alton and in those towns crossed by the coal haul truck traffic (e.g., Hatch and Panguitch). Impacts in Alton could include community and social impacts from population increase, air quality impacts, and blasting impacts. Impacts along the coal haul route would primarily be associated with increased truck traffic, and could include safety, noise, and air quality concerns. If any



disproportionate adverse impacts are identified, we recommend that the BLM consider mitigation measures to reduce those impacts and involve the affected communities in developing the measures.

## **B. Protection of Surface Water Quality**

### ***1. Mitigation to Reduce Sediment Runoff to Kanab Creek***

Kanab Creek is on the State of Utah's Clean Water Act §303(d) List of Impaired Waters ("303(d) List") for total dissolved solids (TDS) downstream of the project area, and also is known to have elevated levels of total suspended solids (TSS) and phosphorous. Utah Division of Oil Gas and Mining (UDOGM) monitoring data collected since 2005 also suggest that additional upstream segments have similarly elevated TDS levels. This data is available on the UDOGM website. While sediment retention ponds anticipated to be required by the Utah Pollutant Discharge Elimination System (UPDES) permit for development of the coal tract will capture sediment runoff from pit disturbance and centralized facilities, dispersed facilities have the potential to impact water quality in Kanab Creek. We recommend that the BLM include a lease stipulation that prohibits development of dispersed facilities in the floodplain of Kanab Creek to minimize potential impacts, in accordance with Executive Order 11988, Flood Plain Management. We additionally recommend that Best Management Practices (BMPs) that may be required to mitigate potential impacts, either by the BLM or through the UPDES permit, be listed in Section 4.16.6 – Potential Mitigation Measures, for disclosure purposes. Information on stormwater BMPs can be found at EPA's National Menu of Stormwater Best Management Practices website (<http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm>).

### ***2. Improving Bank Stabilization During Relocation of Robinson Creek***

It is not clear to us from the Draft EIS whether Robinson Creek will be permanently relocated, or whether the 0.49 – 0.81 mile stretch will eventually be restored to its original channel. Robinson Creek is currently ranked as "Functional – At Risk" as defined by the BLM's Proper Functioning Condition Assessment protocol, due to downcutting of streambanks and mass wasting of sediment into the channel. We therefore recommend that the BLM improve bank stabilization when rerouting Robinson Creek into the manmade channel to improve functionality of the creek to the maximum extent possible. If Robinson Creek is eventually restored to its original channel, we recommend that efforts be made to improve its condition long-term as well.

## **C. Greenhouse Gas Emissions and Climate Change**

### ***1. Quantification of Methane Emissions***

The Draft EIS should disclose methane emissions associated with the coal mining activities. Coal mining results in large fugitive emissions of methane, a greenhouse gas which is 20 times more potent than CO<sub>2</sub> emissions. For that reason we recommend that methane emissions be quantified, just as BLM has quantified CO<sub>2</sub> emissions for the proposed coal development. Please see the EPA's Coalbed Methane Outreach Program website for additional information on methane emissions from coal mining activities ([www.epa.gov/cmop](http://www.epa.gov/cmop)). The EPA notes that the Draft EIS includes useful information regarding the link between greenhouse gases and climate change and the potential impacts of climate change, including a discussion of ongoing and projected climate change impacts in the United States.



## *2. Mitigation of GHG Emissions*

The Draft EIS does not identify mitigation measures to reduce GHG emissions from coal tract activity. Such measures should be discussed in the EIS and could include the installation and operation of a methane collection system prior to topsoil and overburden removal, methods for utilizing the methane onsite to offset diesel (or other fuel) combustion, and fuel efficiency or vehicle reduction to minimize mining operations impacts.

### D. Sage Grouse Protection

It appears that the seasonal restrictions developed to protect sage grouse under Alternative C have the unfortunate side-effect of creating additional PM<sub>10</sub> emissions, due to the operating scenario that includes two simultaneously open pits. Further, the Draft EIS predicts that even with the mitigation measures proposed, coal mining could result in displacement or loss of the local sage grouse population. This is of particular concern because the small Alton-Sink Valley population, which occupies the southernmost active lek in North America, has been identified as being highly susceptible to extirpation. Alternative K was considered to protect sage grouse by removing portions of the tract from leasing, but was eliminated from detailed analysis because it would result in a noncompetitive leasing situation. We recommend that the BLM reconsider whether a reasonable alternative exists that would eliminate critical areas of sage grouse habitat from leasing. Such an alternative would have potential benefits for both air quality and sage grouse. If such an alternative does not exist, we recommend that simultaneously open pits be minimized to the maximum extent possible.

### E. Mitigation of Night Sky Impacts

According to the Draft EIS, nighttime lighting will result in a 10% increase in brightness 1° above the horizon at Yovimpa Point in Bryce Canyon National Park, and direct glare would be visible at times from Brian Head Peak near Cedar Breaks National Monument. The Draft EIS concludes that night sky impacts do not reach a level of significance, but does not explain how this level was defined. Because dark night skies are a valuable resource in the area of the proposed Alton Coal tract, we recommend that the BLM's conclusions regarding the significance of night sky impacts be explained in the EIS. We support the fact that the BLM has acknowledged the importance of the resource, and included a list of potential mitigation measures in the Draft EIS. We recommend that the BLM consult with the National Park Service to determine whether any of these mitigation measures are necessary to protect night sky resources, and if so, we recommend that they be identified in the EIS as lease stipulations.

We appreciate the opportunity to comment on this document, and hope our suggestions for improving it assist you with preparation of the Final EIS. We would be happy to meet to discuss these comments and our suggested solutions. The EPA also looks forward to assisting the BLM in the preparation of the Supplement to the Draft EIS. If you have any questions on the comments provided in this letter, please

contact me at 303-312-6925. You may also contact Molly Vaughan, lead reviewer for this project, at 303-312-6577 or [vaughan.molly@epa.gov](mailto:vaughan.molly@epa.gov).

Sincerely,



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Office of Ecosystems Protection and Remediation